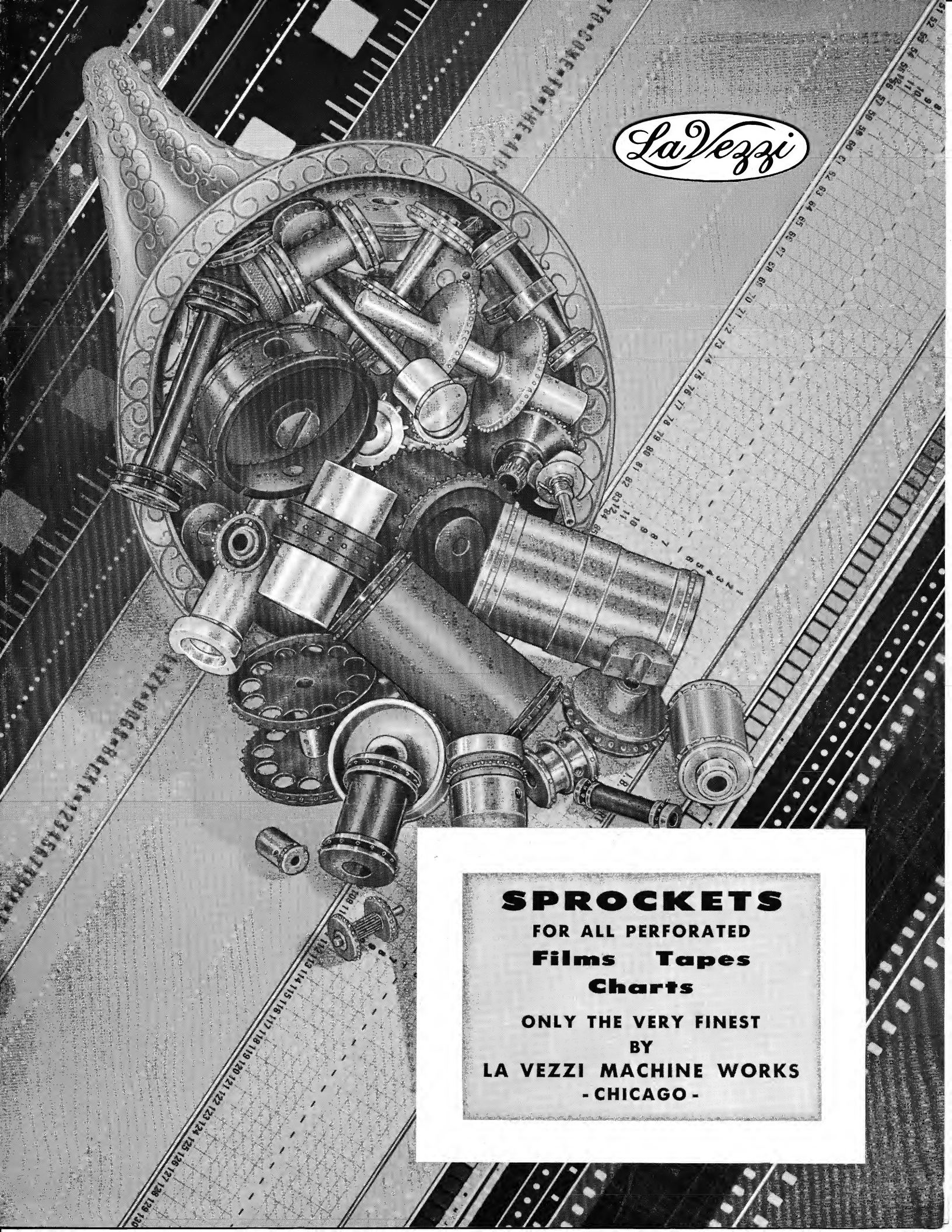
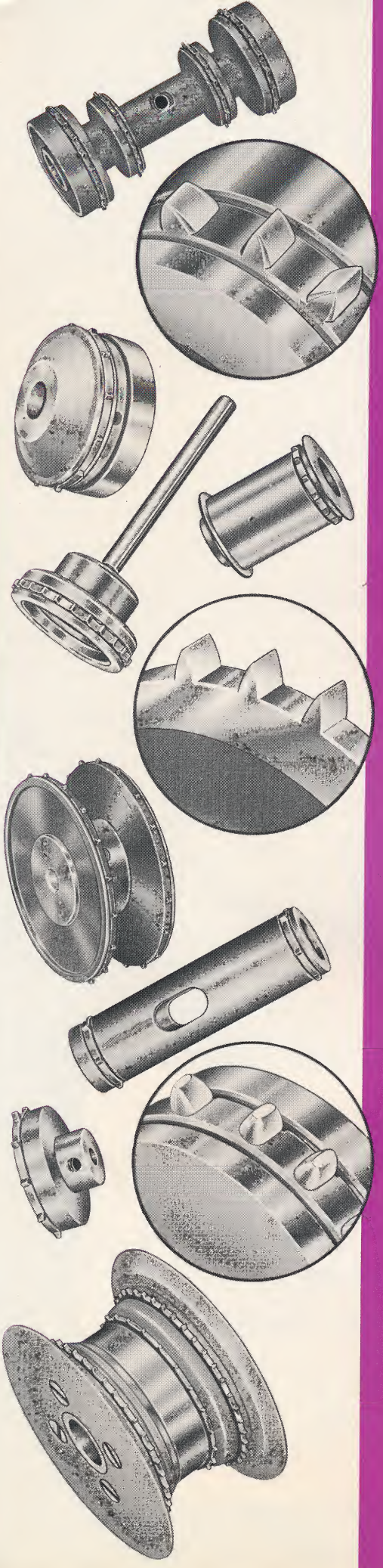

LaVezzi
SPROCKETS
FOR ALL PERFORATED
Films Tapes
Charts
ONLY THE VERY FINEST
BY
LA VEZZI MACHINE WORKS
- CHICAGO -



LaVezzi

BROCHURE S-58

THE MANUFACTURE OF SPROCKETS has been a specialty of LaVezzi Machine Works since the founding of the firm in 1908, and today sprockets by LaVezzi are in use in nearly every type of equipment which uses perforated tapes or film. Sprockets by LaVezzi are famous for their extreme accuracy and consistently high quality. Teeth are perfectly formed, with no sharp edges and absolutely no burrs. Tooth register is held to extreme limits, as is concentricity, tooth size, film diameters and every other important specification. LaVezzi sprockets avoid all possible film or tape damage and both sprocket and perforated stock enjoy longer useful life because of their accuracy.

LA VEZZI SPROCKETS MANUFACTURED TO YOUR SPECIFICATIONS. The equipment you are designing or building may well be more efficient if the sprockets are made specifically for you to your specifications, including all features which add to the overall performance of the unit. We would suggest that you submit your drawings or sketches, or simply a set of specifications, showing the pertinent information, dimensions, tolerances and features you would like included. With this information we will promptly prepare and submit our quotations covering the quantities you suggest. Quantities may range from small lots for prototype use to production lots of several thousand.

Design possibilities are unlimited, as will be seen by the variety of sprockets pictured in this book. Nearly any practical material can be used and sizes can vary from a very tiny 4 or 5 tooth sprocket up to the largest of sprockets for 70mm or wider films. The tolerances required by your actual operating needs should be specified since this often affects production methods. LaVezzi production departments are well equipped and accustomed to working to the very finest limits on size, concentricity, registration, surface finish, etc.

The sprocket teeth are the most important consideration, of course, and great care should be taken to see that they are of the proper design for the application. LaVezzi can produce any tooth form you request, holding strict limits on size, form, finish and tooth-to-tooth error. The teeth are cut on special equipment designed and built by LaVezzi and used for this purpose only. The cutting tools are made by LaVezzi so that no time is lost in waiting for tools, and the cost of tooling held to a minimum. If your requirements call for the teeth to completely fill the perforation in width, the tooth corners must clear the fillet radii in the perforation corners, and thru a special machining operation the tooth corners can be rounded to any extent required.

STOCK SPROCKETS BY LA VEZZI are described on pages 3 thru 10. These are all "on-the-shelf" ready for immediate delivery, and are available in such a variety of materials, designs, and sizes as to meet most of your requirements.

ORDERING INFORMATION: Your orders for stock sprockets may be placed by phone, wire, or mail, and each will be handled promptly and carefully. Only the part number and brief description of each item is required. Orders should be submitted on company purchase order forms or letterheads. A complete price list is attached.

LaVezzi MACHINE WORKS

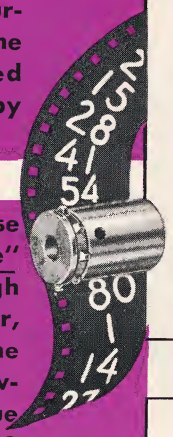
4635 WEST LAKE STREET • CHICAGO, ILLINOIS 60644

PHONE: AREA 312, 378-1636

LaVezzi

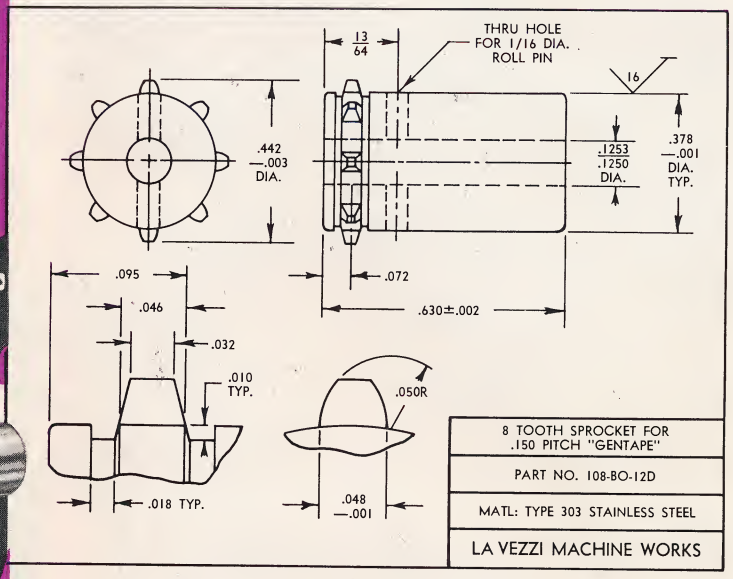
STOCK SPROCKETS

On this and following pages are complete detailed descriptions of sprockets available from LaVezzi for immediate off-the-shelf delivery. These are sprockets of high quality, with accurately formed teeth and tooth spacing, completely burr-free. The film diameters are ground for smooth surface finish, and close concentricity with the shaft hole. Your orders will be handled promptly and carefully whether placed by phone, wire, or mail.



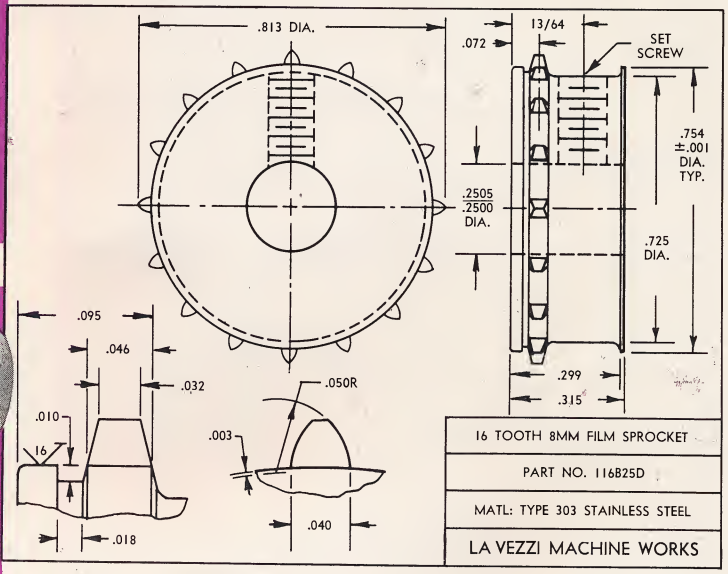
PART 108-BO-12D

This is an 8-tooth sprocket designed for use with .150 pitch perforations in "Gentape" or other tapes having extremely high dimensional stability. The tape diameter, therefore, makes allowance only for the thickness of the tape, and makes no allowance for variation in perforation pitch due to the tape stretch or shrinkage. The .048 tooth width permits this sprocket to drive tape forward and reverse with minimum backlash. Material is non-magnetic. Tape diameter is concentric to bore within .001 T.I.R.



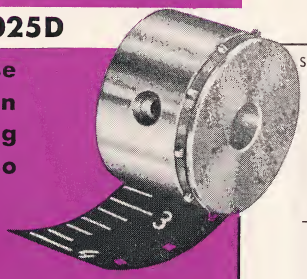
PART 116-B-25D (8MM)

This is a 16-tooth sprocket designed for use with 8mm motion picture film, per American Standard PH22.17-1965, and is suitable for use in many types of equipment. Standard practice is followed in lateral design, film diameter, and tooth form. Material is non-magnetic. Film diameter is concentric to bore within .001 T.I.R.

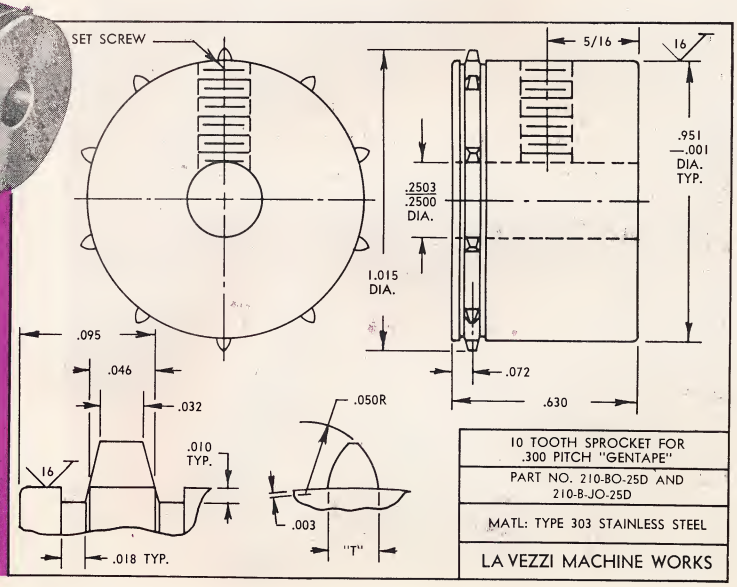


PART 210B025D OR 210BJ025D

This sprocket is designed for use with .300 pitch perforations in "Gentape" or other tapes having dimensional stability. It may also be used with .150 pitch perforations, engaging every other perforation. No allowance is made for tape stretch or shrinkage. Material is non-magnetic. Tape diameter is concentric to bore within .001 T.I.R. The .048 tooth width of part 210BJ025D permits this sprocket to drive the tape forward and reverse with minimum backlash.



PART	"T" (TOOTH WIDTH)
210B025D	.038 + .002
210BJ025D	.048 — .001



LA VEZZI MACHINE WORKS

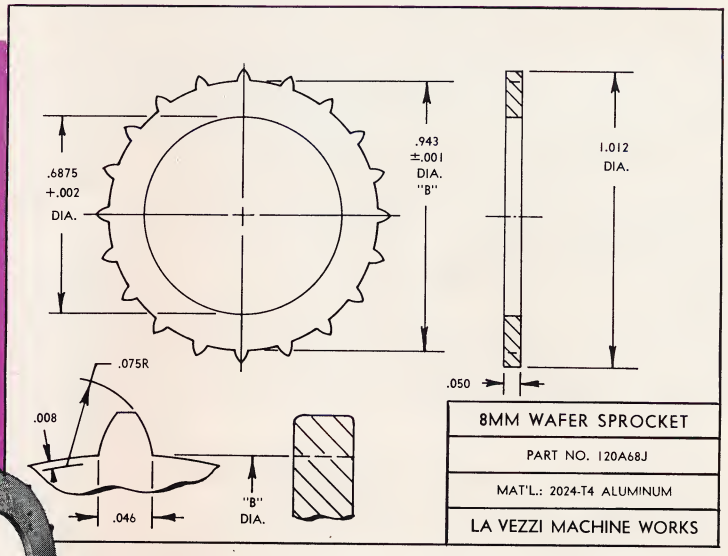
4635 WEST LAKE STREET, CHICAGO, ILLINOIS 60644, PHONE: AREA 312, 378-1636

LA VEZZI STOCK PARTS

PART NO. 120A68J (8MM)

This 20-tooth wafer type sprocket for .150 pitch films or tapes may be used in a variety of equipment by securing to a sprocket body of suitable design. Material is aluminum, for light weight and for its non-magnetic quality. The .046 tooth width is ideal where minimum film backlash is required.

This is an economical item for low cost applications, where high precision and quality appearance is not required.

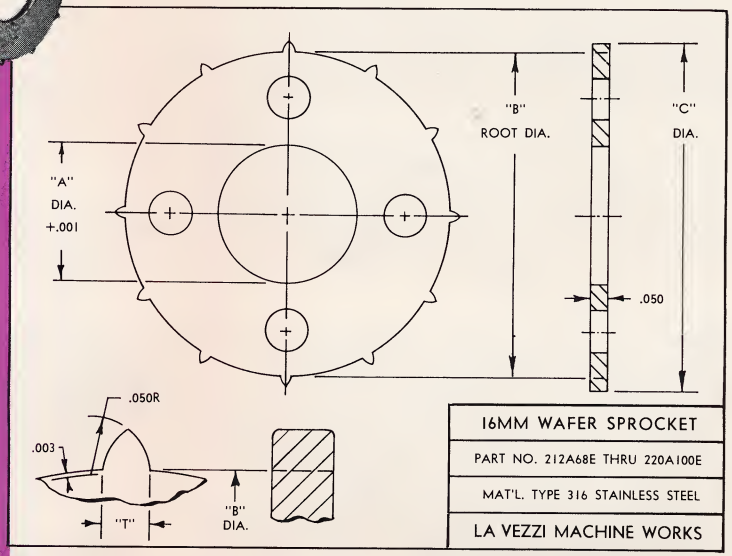


8MM WAFER SPROCKET
PART NO. 120A68J
MAT'L.: 2024-T4 ALUMINUM
LA VEZZI MACHINE WORKS

WAFER TYPE SPROCKETS (16MM)

For films having .300 pitch perforations, per American Standard PH22.12-1964. Part 212A68E has no mounting holes. Parts 220A62E thru 220A100E have four .228 diameter holes equally spaced on 1-13/32 diameter circle. These holes have no angular relationship to the sprocket teeth.

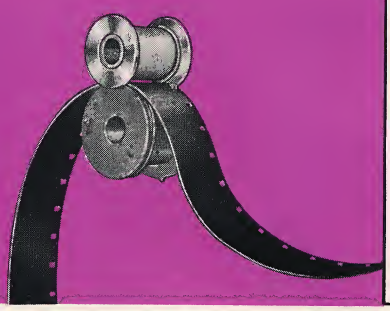
PART NO.	TEETH	"A"	"B"	"C"	"T"
212A68E	12	.6875	1.133	1.201	.040
220A62E	20	.625	1.892	1.960	.036
220A75E	20	.750	1.892	1.960	.036
220A100E	20	1.000	1.892	1.960	.036

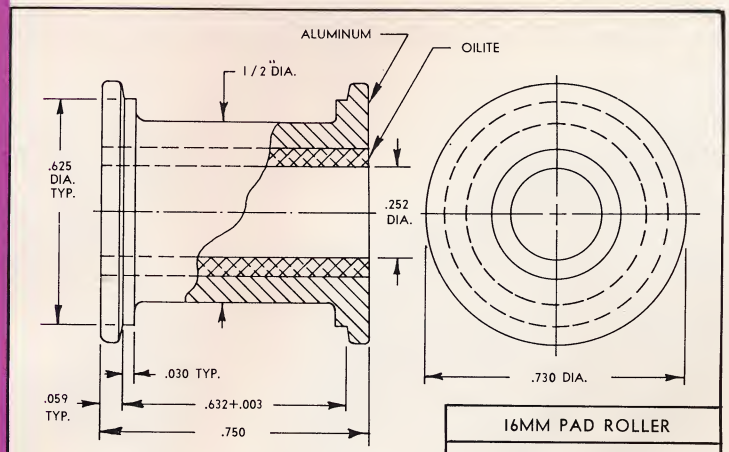


16MM WAFER SPROCKET
PART NO. 212A68E THRU 220A100E
MAT'L. TYPE 316 STAINLESS STEEL
LA VEZZI MACHINE WORKS

PART NO. AOR-2-25 (16MM)

This 16mm pad roller is designed for use with any of the LaVezzi 16mm film sprockets and is used to hold the film against the sprocket. It may also be used as an idler or tension roller. Material is anodized aluminum, with an Oilite bearing, for use with a .2500 diameter shaft.



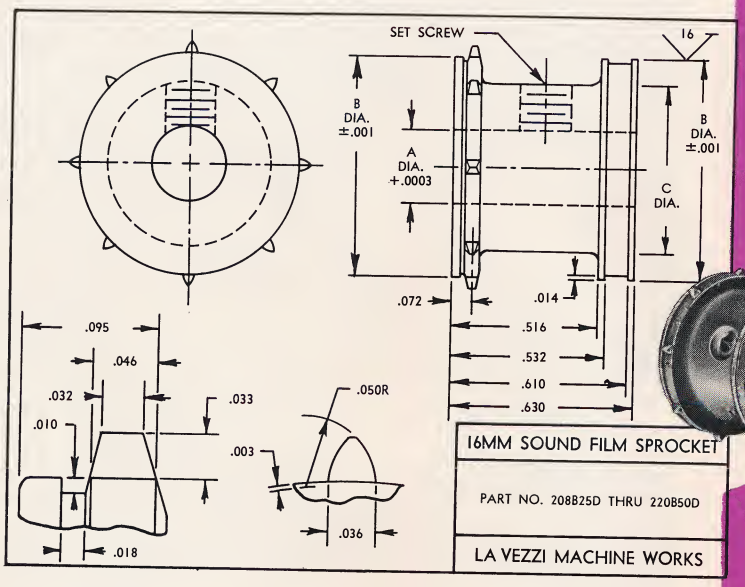


16MM PAD ROLLER
PART NO. AOR 2-25
ALUMINUM-OILITE
LA VEZZI MACHINE WORKS

LA VEZZI MACHINE WORKS
4635 WEST LAKE STREET, CHICAGO, ILLINOIS 60644, PHONE: AREA 312, 378-1636

LA VEZZI STOCK SPROCKETS FOR 16MM

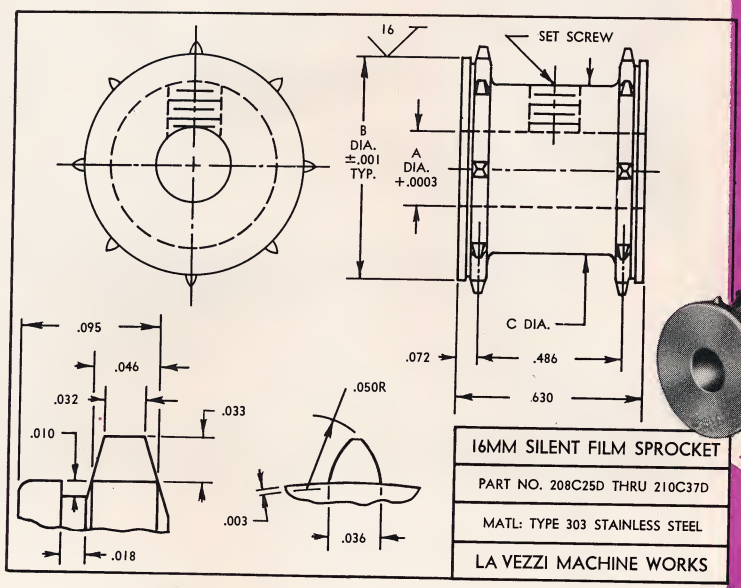
The drawing at the top of this page describes a group of sprockets for use with 16MM sound film, perforated on one side only, .300 pitch perforations, per American Standard PH22.12-1964. The film diameters "B" are concentric with the shaft hole "A" within .002 T.I.R. The screw hole has no angular relationship to the sprocket teeth. Material is non-magnetic #303 stainless steel on all except 208B25F and 210B37A.



PART NO.	TEETH	"A"	"B"	"C"
208B25D	8	.2500	.753	9/16
208B25F*	8	.2500	.753	9/16
208B31D	8	.3125	.753	9/16
210B25D	10	.2500	.941	3/4
210B31D	10	.3125	.941	3/4
210B37A**	10	.3750	.945	51/64
210B37D	10	.3750	.941	3/4
216B31D	16	.3125	1.514	1-21/64
216B37D	16	.3750	1.514	1-21/64
216B50D	16	.5000	1.514	1-21/64
220B31D	20	.3125	1.897	1-45/64
220B37D	20	.3750	1.897	1-45/64
220B50D	20	.5000	1.897	1-45/64

*Part 208B25F is made from type #416 stainless steel, and has two set screws at 90°.

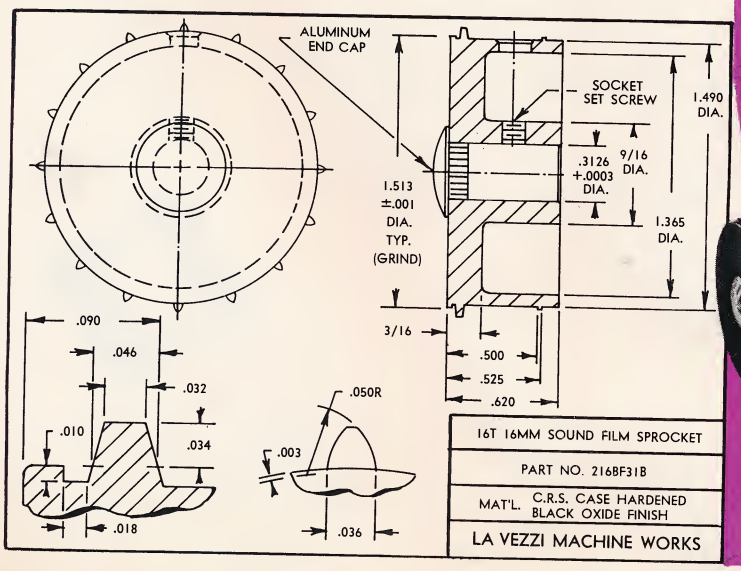
**Part 210B37A is made from B-1113 C.R.S.



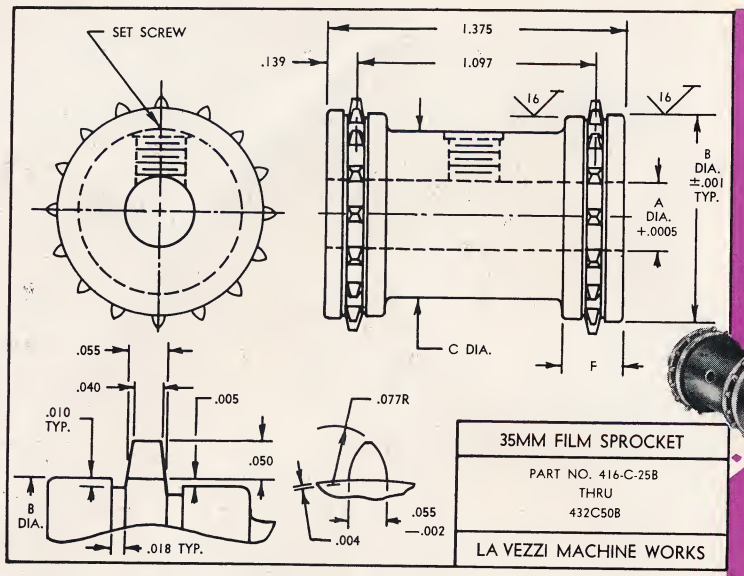
The center drawing on this page describes a group of sprockets for use with 16MM silent film, perforated on both sides, .300 pitch perforations, per American Standard PH22.5-1964

PART NO.	TEETH	"A"	"B"	"C"
208C25D	8	.2500	.753	9/16
208C31D	8	.3125	.753	9/16
210C25D	10	.2500	.941	3/4
210C31D	10	.3125	.941	3/4
210C37D	10	.3750	.941	3/4

PART NO. 216BF31B

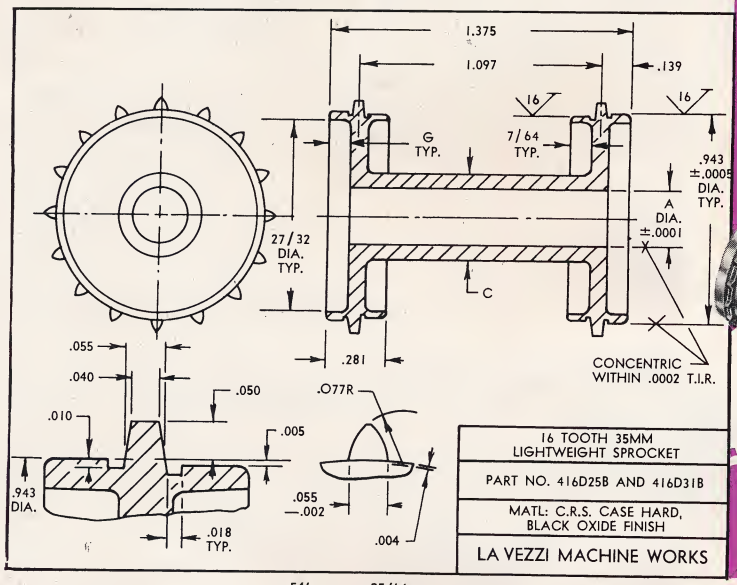


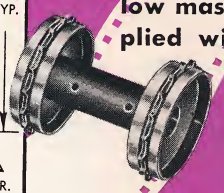
This is a 16-tooth sprocket for 16mm sound film, suitable for use on many types of projectors and other equipment. It is case hardened for best wear life, finished in black oxide prior to grinding of the film diameters for good appearance, and relieved in cross section for light weight. The sprocket is equipped with a special decorative aluminum plug to conceal the end of the sprocket shaft. This is a sprocket of high quality, long useful life, and comparatively low cost.



Regular tooth sprockets for use with 35mm motion picture film with .187 pitch perforations in accordance with either American Standard PH22.1-1964 or PH22.36-1964. Part 432C37K is made from type 6061-T6 aluminum, suitable for hard coating. All other sprockets are made from cold rolled steel, case hardened, and have a black oxide finish applied before grinding the film diameters.

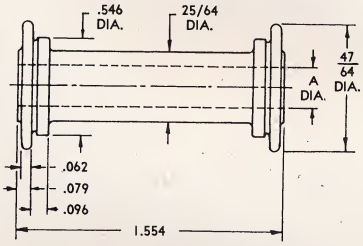
PART NO.	TEETH	"A"	"B"	"C"	"F"
416C25B	16	.2500	.945	.750	.281
416C31B	16	.3125	.935	.750	.281
416C37B	16	.3750	.945	.750	.281
416C50B	16	.5000	.945	.875	.281
432C37K	32	.3750	1.890	1.000	.250
432C37B	32	.3750	1.890	1.000	.250
432C50B	32	.5000	1.890	1.000	.250





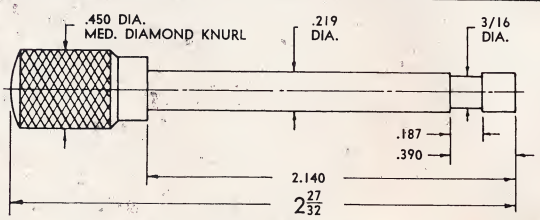
LIGHTWEIGHT SPROCKETS, 16 tooth, for 35mm films described above. These are designed for intermittent application or other use where low mass is required. 416D25B (photo) is supplied with two 3° taper pins located 1/2" apart on Diameter "C". Diameter "C" is not hardened. 416D31B is equipped with bolt and nut clamp thru Diameter "C", similar to the photo on the opposite page.

PART NO.	"A"	"C"	"G"
416D25B	.2501	.375	7/64
416D31B	.3126	.475	.105

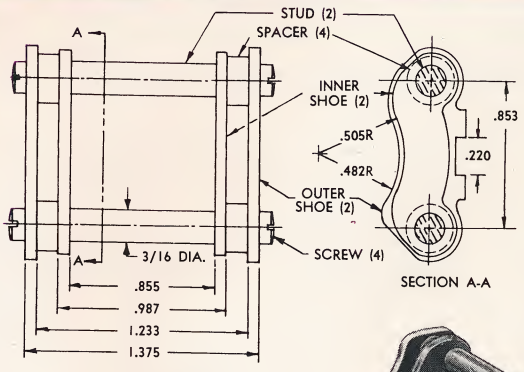


NYLON PAD ROLLER, suitable for use with any 35mm sprockets on this and opposite page. Part is molded in one piece of a high quality gray nylon material.

PART NO. MNR-221	"A" Dia. = .221
PART NO. MNR-251	"A" Dia. = .254



PART NO. C-12 PAD ROLLER STUD for use with MNR-221 roller. Material is cold rolled steel, black oxide finish.



PART NO. E-73-C SPROCKET SHOE ASSEMBLY for use with any 16 tooth 35mm sprocket on this or opposite page. Material is cold rolled steel with black oxide finish.

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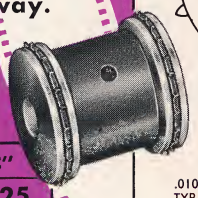
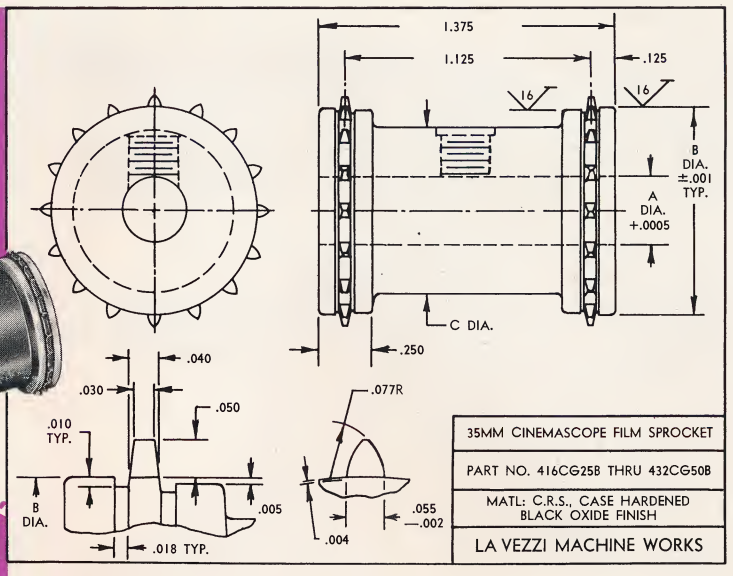
Narrow tooth sprockets for 35mm film with .187 pitch perforations, per American Standard PH22.102-1964 (CinemaScope), or PH22.1-1964 or PH22.36-1964. Material is cold rolled steel, case hardened, black oxide finish. All sprockets include set screw except 424CG37G (shown in photo) which has a .125 dia. pin thru one wall to engage a keyway.

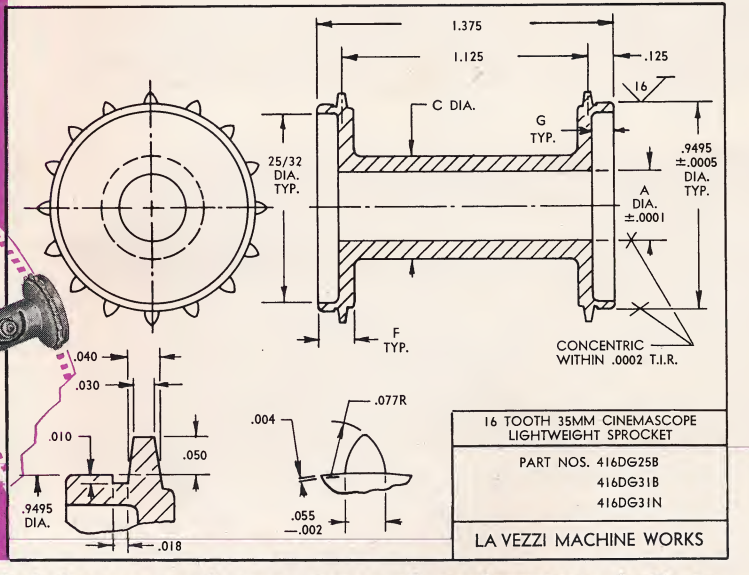


PART NO.	TEETH	"A"	"B"	"C"
416CG25B	16	.2500	.943	.625
416CG31B	16	.3125	.943	.750
416CG37B	16	.3750	.943	.750
416CG50B	16	.5000	.943	.875
424CG37B	24	.3750	1.413	1.218
432CG37B	32	.3750	1.890	1.000
432CG50B	32	.5000	1.890	1.000

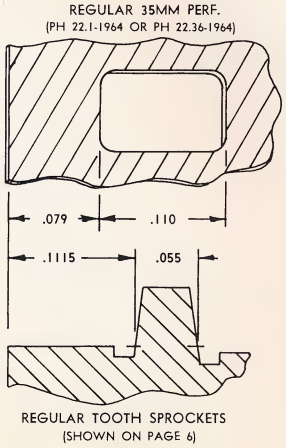


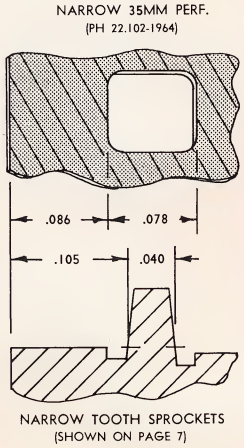
LIGHTWEIGHT SPROCKETS, 16 tooth, for use with films described above. Sprocket in photo is Part No. 416DG31N. Material of 416DG25B and 416DG31B is CRS, case hardened, with black oxide finish. Material of 416DG31N is 6061-T6 aluminum with .001/.002 thick hard coat finish. Part No. 416DG25B has two 3° taper pins 1/2" apart, part 416DG31B and 416DG31N have a bolt and nut clamp as shown in photo.

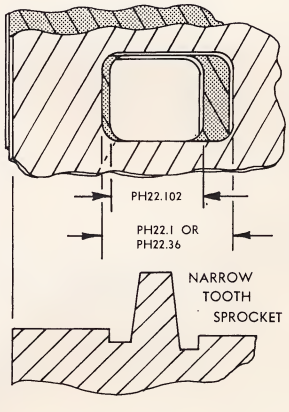
PART NO.	"A"	"C"	"F"	"G"
416DG25B	.2501	.375	.152	7/64
416DG31B	.3126	.465	.165	.105
416DG31N	.3126	.465	.165	.105



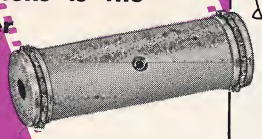
The 35mm sprockets on these pages are intended for use with two types of perforations, both in common usage. These are briefly described here to show how the perforation covered by PH22.102 is narrow and closer to the edge of the film. It is obvious that the regular type sprocket tooth could not be used with the narrow perforated film, however, the sketch below illustrates how the narrow tooth sprockets may be used efficiently with either film type.



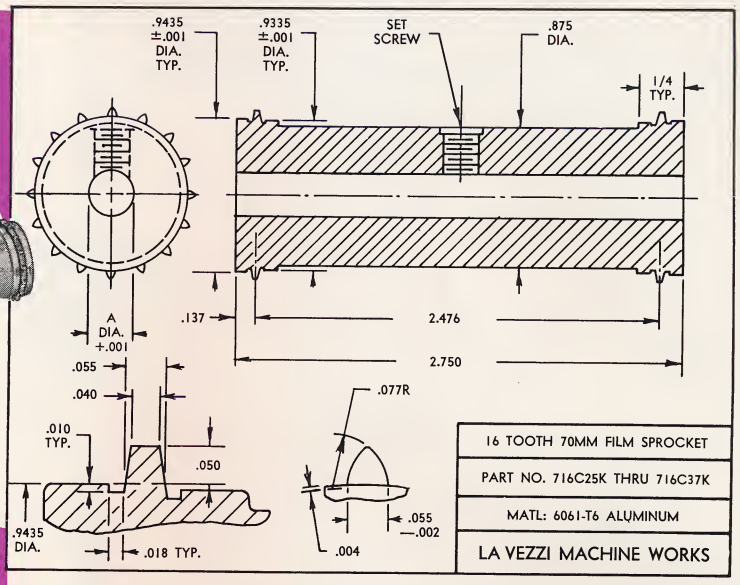




SPROCKETS FOR USE WITH 70mm FILM with .187 pitch perforations per American Standard PH1.20-1956, Type II perforations. (The size and pitch of these perforations is the same as those used for 35mm per American Standard PH22.36-1964.) This aluminum material is suitable for hard coating.

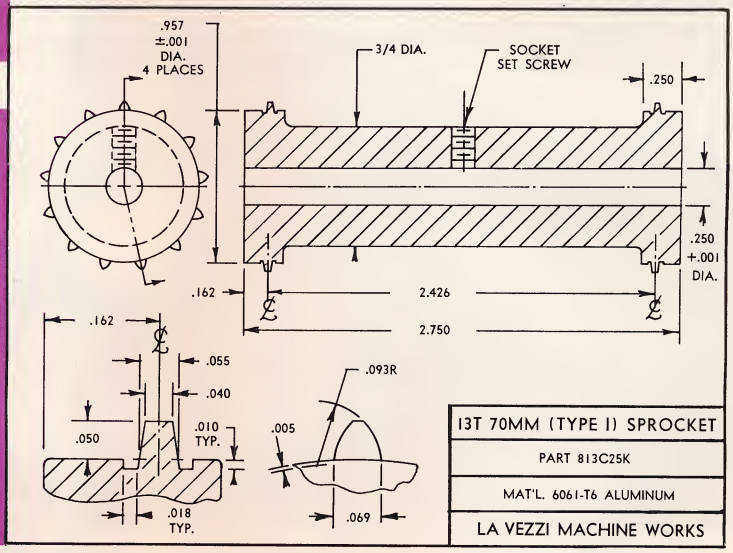


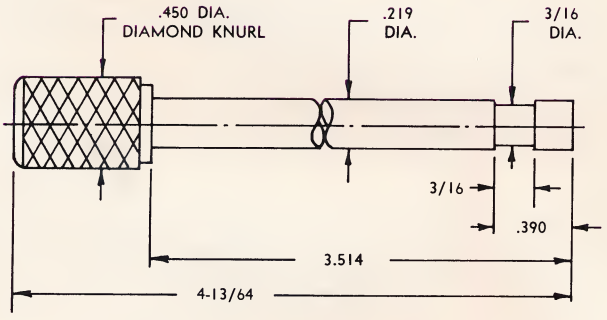
PART NO.	"A"
716C25K	.250
716C31K	.3125
716C37K	.375



PART NO. 813C25K

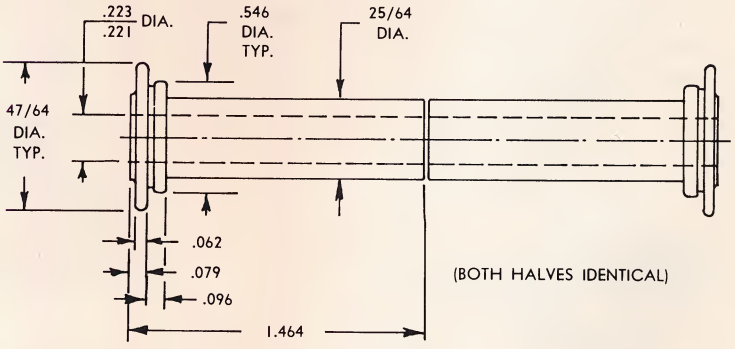
Sprocket for use with 70mm film with .234 pitch perforations per American Standard PH1.20-1956 type I perforation. This sprocket with 13 teeth is approximately the same diameter as the 16-tooth sprockets shown above for the type II 70mm perforations, and is ideal for use where it is necessary to convert a piece of equipment from one film type to the other within the same space limits. Material is aluminum, suitable for hard coating.





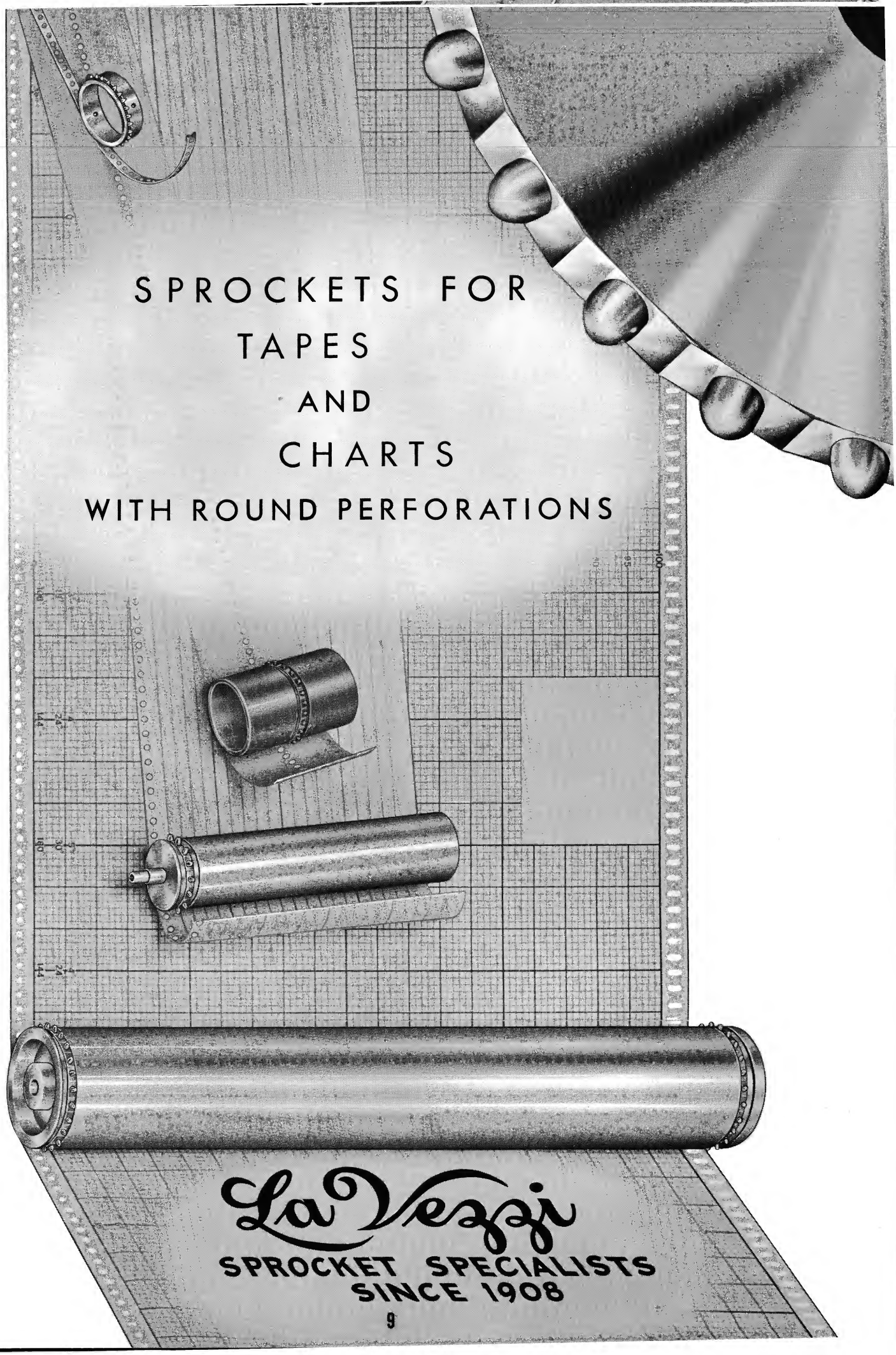
PART NO. C-12-70

Pad Roller Stud for 70mm, for use with the MNR-7-22 nylon pad roller. Material is cold rolled steel, with black oxide finish.



PART NO. MNR-7-22

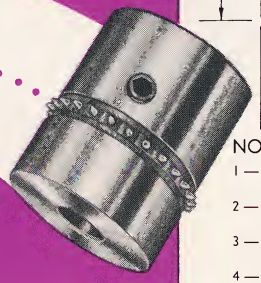
Nylon pad roller for use with the 70mm sprockets on this page, either type I or type II. This part is molded from gray nylon, and is a two-piece roller, both halves identical.

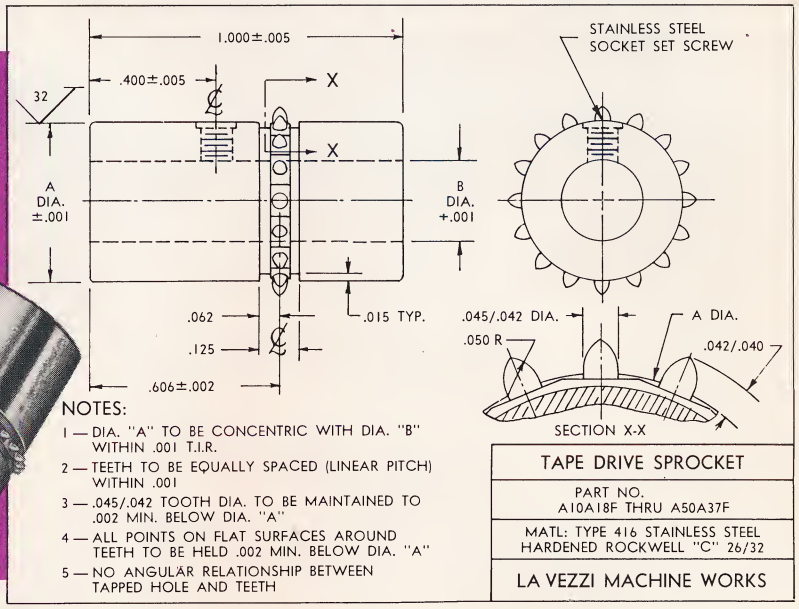

SPROCKETS FOR
TAPES
AND
CHARTS
WITH ROUND PERFORATIONS
La Vezzi
SPROCKET SPECIALISTS
SINCE 1908

DRIVE SPROCKETS FOR PERFORATED TAPE

A Specialty of LaVezzi

The manufacture of tape driving sprockets is a unique specialty, to be sure! It is typical, however, of the work performed at LaVezzi Machine Works, where since 1908 all production has been on small machined parts of intricate design, extremely close tolerances, and involved machining techniques.





NOTES:

1 — DIA. "A" TO BE CONCENTRIC WITH DIA. "B" WITHIN .001 T.I.R.
2 — TEETH TO BE EQUALLY SPACED (LINEAR PITCH) WITHIN .001
3 — .045/.042 TOOTH DIA. TO BE MAINTAINED TO .002 MIN. BELOW DIA. "A"
4 — ALL POINTS ON FLAT SURFACES AROUND TEETH TO BE HELD .002 MIN. BELOW DIA. "A"
5 — NO ANGULAR RELATIONSHIP BETWEEN TAPPED HOLE AND TEETH

TAPE DRIVE SPROCKET
PART NO. A10A18F THRU A50A37F
MATL: TYPE 416 STAINLESS STEEL HARDENED ROCKWELL "C" 26/32
LA VEZZI MACHINE WORKS

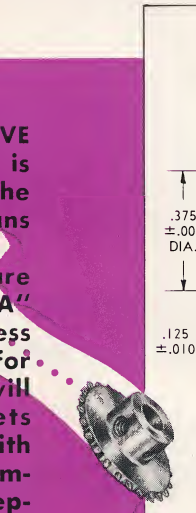
Part No.	Dia. "A"	Dia. "B"	No. Teeth
A10A18F	.3143	.1875	10
A12A18F	.3779	.1875	12
A16A25F	.5053	.2500	16
A20A25F	.6326	.2500	20
A24A25F	.7599	.2500	24
A30A37F	.9509	.3750	30
A32A37F	1.0146	.3750	32
A36A37F	1.1419	.3750	36
A40A37F	1.2692	.3750	40
A50A37F	1.5875	.3750	50

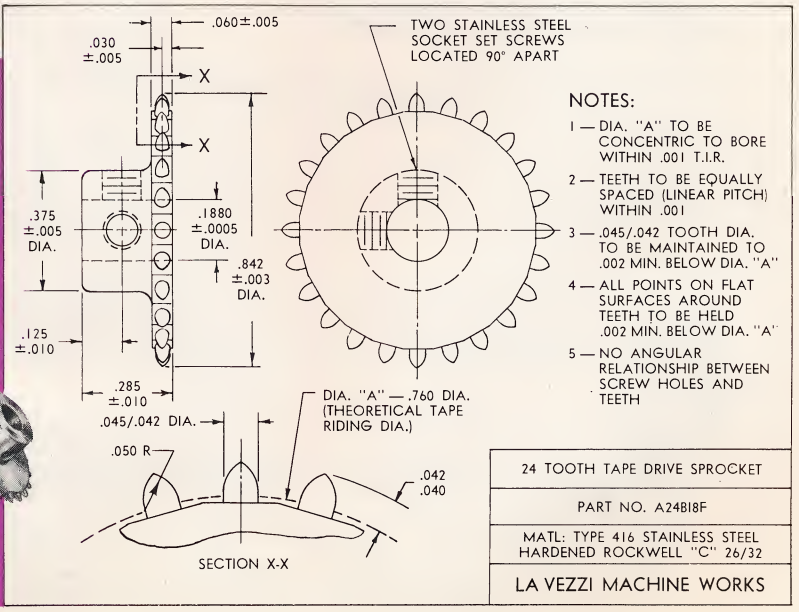
LA VEZZI STOCK TAPE DRIVE SPROCKETS — A complete line of sprockets is available to you from stock for immediate delivery! The listing at left and drawing above describe this line of sprockets, designed for use with the standard 1" wide tape with .100 pitch perforations, .046 in diameter, per EIA Standard RS-227. All are made from type #416 stainless steel, hardened for good wear resistance, but easily re-machined if modifications are required.

This stock line is of great benefit to those doing research, design, and development work since the sprockets are immediately available, moderately priced and cover a wide range of sizes. Where production requirements dictate larger quantities, special prices will apply and changes in material, design, tolerances, etc., can be accommodated, as outlined on the next page.

THE PART NO. A24B18F TAPE DRIVE SPROCKET, available from stock, is designed for applications where the tape is to be supported by a means other than the sprocket.

All stock sprockets on this page are designed with a tape diameter "A" making allowance for tape thickness only, and making no allowance for tape stretch or shrinkage. You will notice that all LaVezzi sprockets have teeth machined integral with the sprocket body, giving a completely dependable part of exceptional quality.





NOTES:

1 — DIA. "A" TO BE CONCENTRIC TO BORE WITHIN .001 T.I.R.
2 — TEETH TO BE EQUALLY SPACED (LINEAR PITCH) WITHIN .001
3 — .045/.042 TOOTH DIA. TO BE MAINTAINED TO .002 MIN. BELOW DIA. "A"
4 — ALL POINTS ON FLAT SURFACES AROUND TEETH TO BE HELD .002 MIN. BELOW DIA. "A"
5 — NO ANGULAR RELATIONSHIP BETWEEN SCREW HOLES AND TEETH

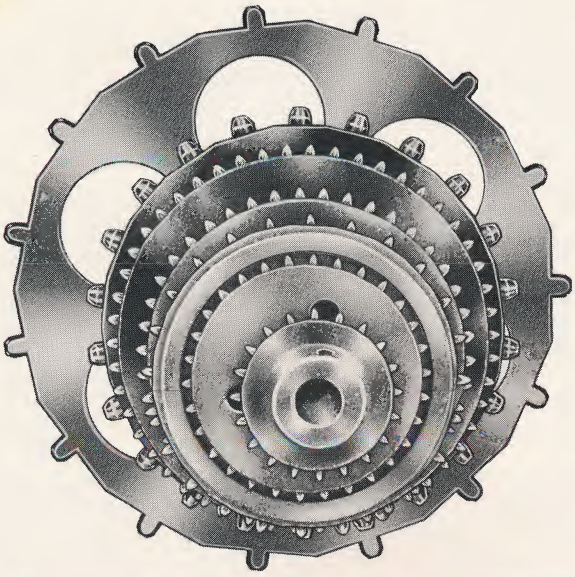
24 TOOTH TAPE DRIVE SPROCKET
PART NO. A24B18F
MATL: TYPE 416 STAINLESS STEEL HARDENED ROCKWELL "C" 26/32
LA VEZZI MACHINE WORKS

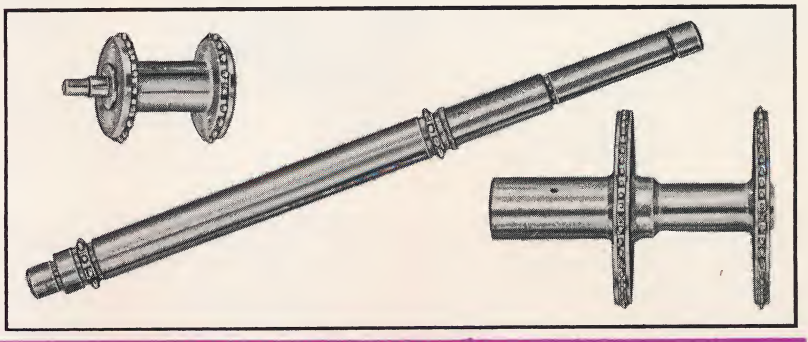
LA VEZZI MACHINE WORKS

4635 WEST LAKE STREET, CHICAGO, ILLINOIS 60644, PHONE: AREA 312, 378-1636

LA VEZZI SPROCKETS FOR ROUND PERFORATIONS MADE TO YOUR SPECIFICATIONS

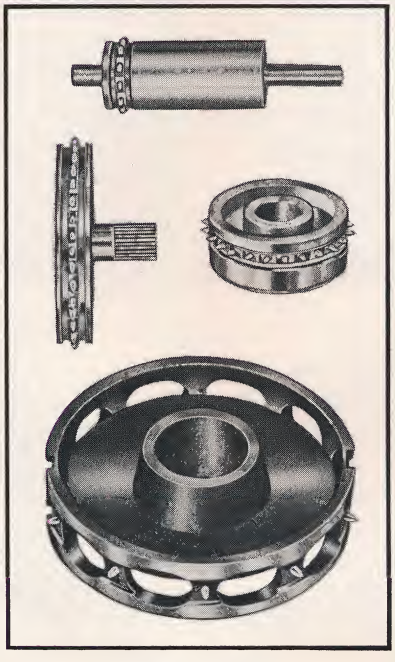
Regardless of the material, style, pitch, or other characteristics of the sprocket you need, LaVezzi is the obvious choice as a well qualified vendor. The long years of experience, highly specialized facilities and manufacturing skills, are available to you, and we earnestly solicit your inquiries and quotation requests on sprockets made to your specifications.





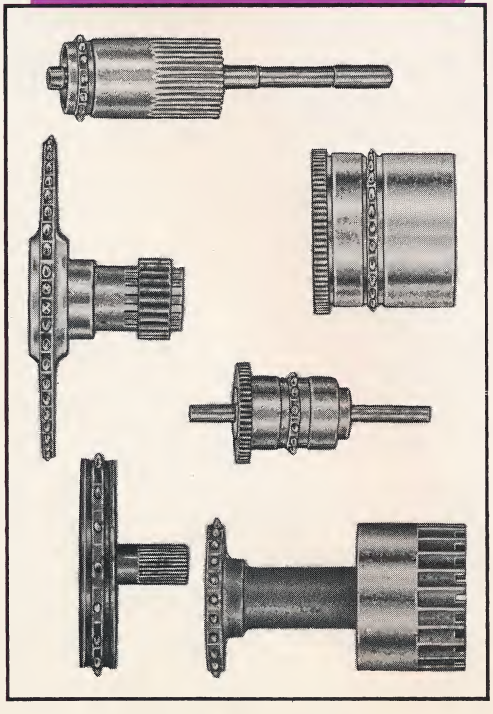
Varying applications require variations in tooth design, and the tooth form which suits your requirement best can be produced by LaVezzi. Exact registration, smooth finish and absolutely burr-free teeth are standard practice.

It is often a design advantage to incorporate gears, clutches, detents, ratchets, or other components as an integral part of the sprocket, and this can be accomplished in many cases to reduce error, and conserve space.

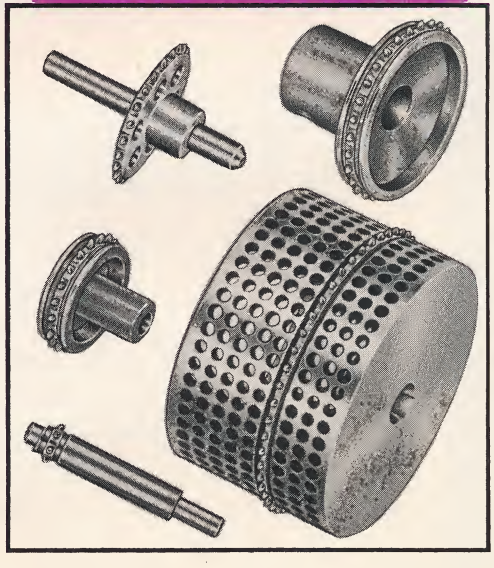


For those tapes having two rows of perforations the driving sprockets can be made from one piece, with accurate center to center distance laterally, and extremely close linear alignment between opposing teeth for positive even drive.

Your sprockets can be made from any practical material determined by your particular application. Stainless steel is indicated for corrosion resistance and fine finish, with the 300 series preferred for its non-magnetic properties. Aluminum is advisable for weight reduction and this can be hard coated for good wear life. We will, of course, be glad to give you the benefit of our experience in selecting the best material for your application.



DRUM TYPE SPROCKETS for use with charts 4" wide or wider are often made as an assembly of sprocket end pieces and a drum, and may have teeth on one or both ends as required by the chart perforations. A typical example is on page 9. Teeth are perfectly formed, with precise spacing and alignment. We will be happy to help in designing a sprocket which will meet your requirements and be most practical for production.



LA VEZZI MACHINE WORKS

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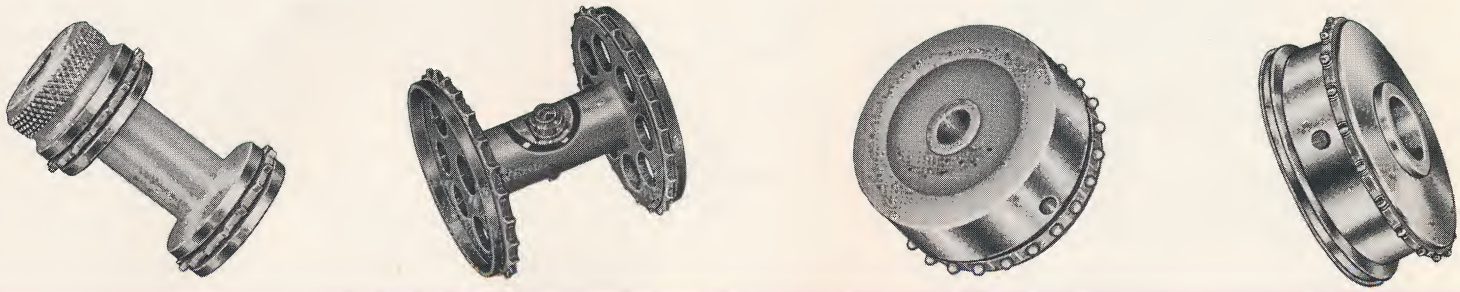
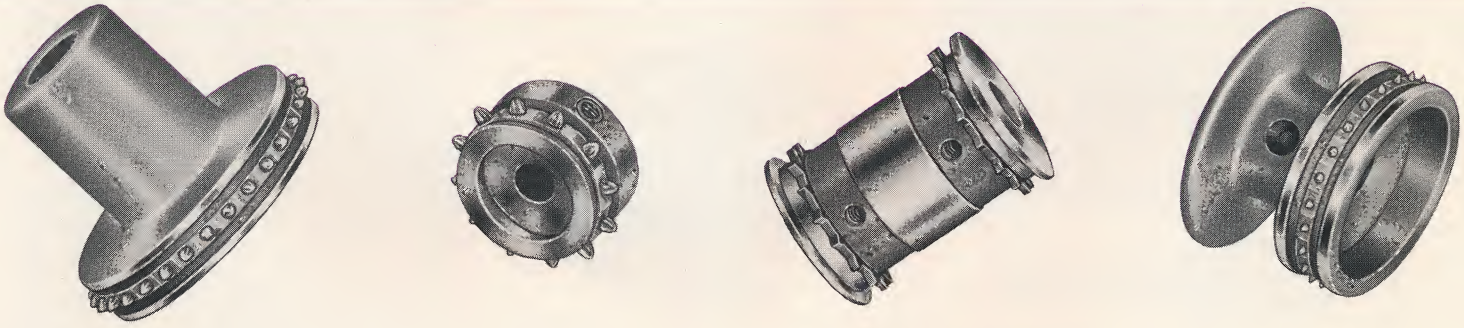


La Vezzi



LA VEZZI MACHINE WORKS
4635 WEST LAKE STREET
CHICAGO, ILLINOIS 60644

ANDREW

See May ~~INFORMATION~~ (black cover) 1633

p. 104

for

Harvard / Mass General

Systems Analyst.

(JOB OFFER)

PRICE LIST
PERTAINING TO BROCHURE S-58

Effective July 1, 1966

LAVEZZI MACHINE WORKS
4635 West Lake Street
Chicago, Illinois 60644

PART NO.	1-49 pcs.	50-99 pcs.	100 pcs.
PAGE 3			
108B012D	$4.50 ea	$4.05 ea	$3.60 ea
116B25D	6.00	5.40	4.80
210B025D	6.00	5.40	4.80
210BJ025D	6.00	5.40	4.80
PAGE 4			
120A68J	.95	.75	.45
212A68E	4.00	3.60	3.20
220A62E	6.00	5.40	4.80
220A75E	6.00	5.40	4.80
220A100E	6.00	5.40	4.80
AOR 2-25	3.50	3.10	2.90
PAGE 5			
208B25D	5.00	4.50	4.00
208B25F	4.50	4.05	3.60
208B31D	5.00	4.50	4.00
210B25D	6.00	5.40	4.80
210B31D	6.00	5.40	4.80
210B37A	5.00	4.50	4.00
210B37D	6.00	5.40	4.80
216B31D	10.00	9.00	8.00
216B37D	10.00	9.00	8.00
216B50D	10.00	9.00	8.00
220B31D	12.00	10.80	9.60
220B37D	12.00	10.80	9.60
220B50D	12.00	10.80	9.60
208C25D	6.00	5.40	4.80
208C31D	6.00	5.40	4.80
210C25D	7.00	6.30	5.60
210C31D	7.00	6.30	5.60
210C37D	7.00	6.30	5.60
216BF31B	8.40	7.70	6.95

PART NO.	1-24 pcs.	25-49 pcs.	50-99 pcs.	100 pcs.
PAGE 6				
416C25B	$6.00 ea	$5.40 ea	$4.80 ea	$3.60 ea
416C31B	5.00	4.50	4.00	3.00
416C37B	6.00	5.40	4.80	3.60
416C50B	6.00	5.40	4.80	3.60
432C37B	20.00	18.00	16.00	12.00
432C37K	18.00	16.20	14.40	10.80
432C50B	20.00	18.00	16.00	12.00
416D25B	12.00	10.80	9.60	7.20
416D31B	12.50	11.25	10.00	7.50
C-12	.80	.72	.64	.48
E-73-C	3.50	3.15	2.80	2.10
MNR-221	.60	.54	.48	.36
MNR-251	.90	.81	.72	.54
PAGE 7				
416CG25B	6.00	5.40	4.80	3.60
416CG31B	5.00	4.50	4.00	3.00
416CG37B	6.00	5.40	4.80	3.60
416CG50B	6.00	5.40	4.80	3.60
424CG37B	7.50	6.75	6.00	4.50
432CG37B	20.00	18.00	16.00	12.00
432CG50B	20.00	18.00	16.00	12.00
416DG25B	12.00	10.80	9.60	7.20
416DG31B	12.50	11.25	10.00	7.50
416DG31N	12.50	11.25	10.00	7.50
PAGE 8				
716C25K	12.00	12.00	10.80	9.60
716C31K	12.00	12.00	10.80	9.60
716C37K	12.00	12.00	10.80	9.60
813C25K	12.00	12.00	10.80	9.60
C-12-70	1.25	1.10	.90	.70
MNR 7-22	1.70	1.50	1.30	1.10

PART NO.	1-11 pcs.	12-24 pcs.	25-49 pcs.	50-99 pcs.	100 pcs.
PAGE 10					
A10A18F	$9.35 ea	$8.42 ea	$7.01 ea	$5.61 ea	$4.68 ea
A12A18F	9.55	8.60	7.16	5.73	4.78
A16A25F	9.95	8.96	7.46	5.97	4.98
A20A25F	10.35	9.32	7.76	6.21	5.18
A24A25F	10.75	9.68	8.06	6.45	5.38
A24B18F	7.95	7.16	5.96	4.77	3.97
A30A37F	11.35	10.22	8.51	6.81	5.68
A32A37F	11.55	10.40	8.66	6.93	5.78
A36A37F	11.95	10.76	8.96	7.17	5.98
A40A37F	12.35	11.12	9.26	7.41	6.18
A50A37F	13.35	12.02	10.01	8.01	6.68

All prices are net, and subject to change without notice. Quantity prices apply only to individual items. All shipments FOB Chicago, by parcel post unless requested otherwise. Terms: COD, or Net 30 days if credit is established; Export Orders, Cash with Order. Special quotations will be offered on quantities over 100 and on modifications to stock designs.